

Sunscreen instructions for patients

What are the sun's rays composed of?

UVA rays: Long-wave rays that penetrate deep into the skin. They tan the skin, but cause it to age more quickly (these are the rays typically used in sunbeds).

UVB rays: Medium-wave rays - these offer skin protection in small quantities; in larger quantities, however, they can cause sunburn and increase the risk of skin cancer.

How long can I stay in the sun without wearing sunscreen?

Use the following equation to determine a sunscreen's **SPF**, or **sun protection factor**:

Self-protection time \times sun protection factor (UVB) = the maximum possible time that can be spent in the sun per day without getting burnt.

To determine your self-protection time, you must know your **skin type**:

Characteristics	Skin type 1	Skin type 2	Skin type 3	Skin type 4
Skin	Very light- skinned	Light-skinned	Light/dark brown	Dark brown, olive
Hair	Red, blond	Blonde, light brown	Light brown, brown	Dark brown, black
Eyes	Blue	Blue, green, grey	Grey, brown	Brown, dark brown
Self-protection time	5-10min	10-20min	20-30min	40min

With a self-protection time of 15 minutes and an SPF of 20, you can spend 300 minutes (15 \times 20) per day in the sun without getting burnt.

In practice, the actual time is often half this figure. Factors such as sweating, contact with water, and reflections (e.g. 30% in water, 90% in snow, and 25% in sand) and a higher UV index (e.g. in the tropics, the Mediterranean, or high mountains) also play a role.

How does suncream work?

A suncream should block both UVB and UVA rays. The UVB protection factor, which is the better known of the two, protects against sunburn. The UVA filter, on the other hand, prevents skin allergies and premature skin ageing. An SPF 30 UVB sunscreen should, for instance, offer a UVA protection factor amounting to at least a third of its SPF. (See UVA symbol)

How can I best protect myself from the sun?

Avoid going into the sun: Do not sit out in the sun when it is at its most intense (between 11:00 and 15:00).

Use sunscreen: Apply half an hour before exposure to the sun. 2 mg/cm² of sunscreen (i.e. approx. 3tbsp. or 30-40 grams for an adult). Reapply after swimming or sport (also applies to water resistant sunscreens). Reapplying cream does not offer greater sun protection. It can, however, protect the skin for a longer period of time.

Wear suitable clothing: The SPF of an item of clothing can often be found on its label. A white T-shirt has an SPF of approximately 10. Shade and a sun umbrella offer an SPF of just 5-10. If the clothing is wet or stretched, its SPF factor decreases.

Nutrition: Consuming sufficient quantities of beta-carotene (found in carrots, squashes, and sweet potatoes), Vitamin C, lycopene (found in tomatoes), Vitamin E, and green tea can provide an SPF of 2 to 3.